

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/009231

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ B23B31/117, 31/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ B23B31/117, 31/26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2004
Kokai Jitsuyo Shinan Koho 1971-2004 Toroku Jitsuyo Shinan Koho 1994-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2002-18610 A (Kabushiki Kaisha Kira Corporation), 22 January, 2002 (22.01.02), Par. No. [0024]; Fig. 4 (Family: none)	1-2 3
Y	JP 11-309614 A (Nippon Koshuha Kogyo Kabushiki Kaisha), 09 November, 1999 (09.11.99), Par. No. [0008]; Fig. 1 (Family: none)	3
Y	JP 7-27041 Y (Yugen Kaisha OK Engineering), 21 June, 1995 (21.06.95), Column 5, lines 32 to 35; Fig. 3 (Family: none)	3

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

Date of the actual completion of the international search
07 October, 2004 (07.10.04)Date of mailing of the international search report
26 October, 2004 (26.10.04)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

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